in the Californian and Hawaiian specimens, whereas Chilton (Jour. Proc. Royal Soc. of N.S.W. **50**: 84, fig. 3) figures this plate as narrow and distally acute with the inside margin concave. This is a very peculiar discrepancy which I cannot account for. Stephensen (Bernice P. Bishop Mus. Bull. **142**: 20, 1935) states that the palp of the maxillipeds has a small fourth joint. In the specimens which I have examined the palp bears a small distal fleshy lobe marked off by a row of spinules, but which does not appear to be separated from the third joint.

Talitrus alluaudi may be expected to appear in greenhouses in other parts of the United States, as it is probably transported in the soil around the roots of plants. The occurrence of *Talitrus sylvaticus* in such widely separated localities as San Diego and New Orleans would seem to indicate that this species is much more common in the warmer parts of the United States than is now known. It is only when interest or curiosity prompts persons to have these creatures identified that their presence becomes known.

# MALACOLOGY.—Two new land shells from the Philippine Islands.<sup>1</sup> PAUL BARTSCH, U. S. National Museum.

In my paper on the land shells of the genus *Obba* from the Mindoro Province, Philippine Islands, published in Bulletin 100, volume 6, part 8, United States National Museum, I discussed *Obba listeri* Gray and figured the type species, as well as a number of subspecies belonging to this group. To these I added several more races in a paper published in the Journal of the Washington Academy of Sciences **24**: 318–323, 1934.

A collection recently received from Mr. Frederick S. Webber contains two unnamed races which are here described.

### Obba listeri webberi, n. subsp.

#### Fig. 1

Shell small, rather elevated, the spire forming a regular, almost hemispheric cone, the lower surface being much less rounded. Nuclear whorls 2.1 horn colored, the last half of the last turn with a pale brown band below the suture and another one occupying a median position. The postnuclear turns are of pale buff ground color and bear interrupted bands of brown, of which the first is near the summit, and the other a little above the middle, while the anterior half of the whorls is flecked and blotched with brown. The under side has an interrupted band about one-third of the distance between the peripheral keel and the umbilicus anterior to the keel, and the region between this interrupted band and the keel is also marked with flecks and blotches of brown. The nuclear whorls are marked by faint lines of growth. On the

<sup>1</sup> Published by permission of the secretary of the Smithsonian Institution. Received October 23, 1935.

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postnuclear whorls the lines of growth increase in strength and are strongly marked, very decidedly so on the last turn. The malleations are strongest anterior to the middle of the turns. The under surface is also strongly malleated and here the malleations extend almost to the umbilicus. The lines of growth here are even stronger than on the spire. The inner half of the base, including the umbilicus, is marked by well incised spiral striations. The umbilicus is rather narrow and about one-third covered by the parietal lip. The last whorl is constricted behind the inner lip, while the outer lip is decidedly deflected. The aperture is oval, slightly angulated at the periphery; peristome moderately thickened and reflected, the inner lip bearing a strong median tooth within.

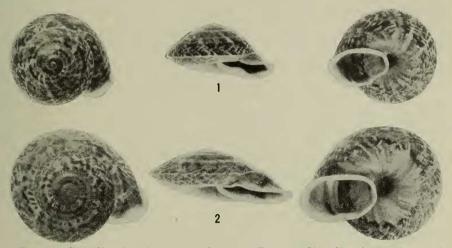


Fig. 1.—Obba listeri webberi, new subspecies. Fig. 2.—Obba listeri catanduanensis, new subspecies.

The type, U.S.N.M. Cat. No. 314057, was collected near the lighthouse on Tres Reyes Island near Marinduque. It has 4.6 whorls, and measures: Height, 12.8 mm.; greater diameter, 25.5 mm.; lesser diameter, 21.0 mm.

U.S.N.M. Cat. No. 314058 contains 3 paratypes from the same station, while 7 additional specimens are in Mr. Webber's collection. The lot yields the following average measurements: Height, 12.8 mm.; greater diameter, 25.9 mm.; lesser diameter, 21.3 mm.

This subspecies is much more elevated, with the spire more regularly conic and the base comparatively more flattened than any of the other named races of *Obba listeri*.

#### Obba listeri catanduanensis, n. subsp. Fig. 2

Shell of medium size, lenticular, of flesh colored ground color, mottled and splotched with dark chestnut brown on the upper surface and also on the outer half of the lower surface. Nuclear whorls 2.3 in the type, horn colored. The first half unicolor, while the succeeding portion shows a brownish flush near the suture and a median, rather broad brown band. The postnuclear portion of the shell shows the brown markings, arranged in more or less regular spiral zones, an interrupted band near the summit, a more or less median broken band and the rest fulgurated and mottled with brown. The nuclear whorls are marked by fine lines of growth, which are a little stronger near the summit and increase in strength as the mollusk adds to the substance of the shell. The postnuclear whorls are strongly acutely keeled at the periphery, which flares slightly upward, and the surface is marked by malleations which are strongest on the outer half of the whorls, and somewhat irregular impressed spiral lines, which are coarser on the upper portion of the whorls. Suture poorly impressed; periphery sharp. The base is moderately arched, the outer half of the last whorl is strongly malleated, the inner half finely spirally striated. The lines of growth here are of the same strength as on the spire. The umbilicus is moderately open, and the shell is constricted immediately behind the inner lip, while the upper lip is decidedly bent upward. The aperture is broadly oval; peristome moderately expanded, thickened and reflected. A low tooth is present on the inside of the middle of the basal lip.

The type, U.S.N.M. Cat. No. 314056, is one of 3 specimens sent to us by Mr. Webber collected at Virac, Catanduanes. It has 4.5 whorls, and measures: Height, 10.6 mm.; greater diameter, 32.1 mm.; lesser diameter, 25.7 mm.

Two paratypes in Mr. Webber's collection yield the following measurements: Height, 12.8 and 12.1 mm.; greater diameter, 31.7 and 33.2 mm.; lesser diameter, 25.8 and 25.8 mm., respectively.

An additional specimen, Ú.S.N.M. Cat. No. 311069, received from Mr. Maxwell Smith, comes from Batu, Catanduanes, a station not far removed from Virac. It yields the following measurements: Height, 10.6 mm.; greater diameter, 32.8 mm.; lesser diameter, 24.7 mm.

This subspecies in general form resembles the typical race, but is much smaller and of much darker coloration.

## ENTOMOLOGY.—Some butterflies from eastern Virginia.<sup>1</sup> AUSTIN H. CLARK and LEILA F. CLARK, U. S. National Museum.

Since the days of Boisduval and Le Conte the butterflies of eastern Virginia have received little attention. Various collectors have visited the region, but only a few notes on some of the more unusual species have been published.

We have made a preliminary reconnaissance of this area, visiting Accomac and Northampton Counties on July 20–27, 1935, Princess Anne County on September 23–24, 1934, and Norfolk and Nansemond Counties on September 1–3, 1935. Although our time was limited, we feel that we secured a fairly complete representation of such butterflies as were flying when we were in any given locality, and therefore that our list is sufficiently detailed to serve as a basis for future intensive work.

Included in the list are records of nine species from Bayford, Northampton County, kindly given us by Dr. Florence Walker of Bayford, and of one from Lake Drummond which we owe to the courtesy of Dr. Paul Bartsch. With these included our list totals sixty-nine species.

<sup>1</sup> Received October 26, 1935.